



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1418  
Alexandria, Virginia 22313-1418  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/340,386	04/25/2001	Yoshihiro Motokura	NEKA 13 612	2510

28304 7360 06/08/2004

KATTEN MUCHIN ZAVIS ROSENMAN  
575 MADISON AVENUE  
NEW YORK, NY 10022-2585

EXAMINER

VINH LAN

ART UNIT

PAPER NUMBER

1785

DATE MAILED: 06-08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# **Advisory Action**

Application No.

09/840,386

Applicant(s)

MATSUBARA ET AL.

Examiner

Lan Vinh

Art Unit

1765

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

## **PERIOD FOR REPLY** (check either a) or b))

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1 and 2.

Claim(s) withdrawn from consideration: 4-11.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

Lan Vinh  
AU 1765

Continuation of 5. does NOT place the application in condition for allowance because: Applicants argument filed on 5/20/2004 has been considered but are not persuasive. Applicants argue that even if such a combination of Ohashi and Matsuo were found, radiating light having a wavelength of 500 nm to less than 1 microm for the purpose of reducing the electromotive force at the PN junction in a semiconductor, thereby inhibiting galvanic effects due to photoexcitation before or after a step including CMP, would not have occurred to those skilled in the art. This argument does not commensurate with the scope of claim 1 because claim 1 does not recite "radiating light having... for the purpose of reducing...including CMP". Applicants also argue that even though Ohashi's teaching does not exclude the use of radiating light on a semiconductor substrate, irradiating with light having a wavelength of 500 nm to less than 1 micronm would not have occurred to those skilled in the art. This argument is unpersuasive because the applicants have not shown that irradiating with light having a wavelength of 500 nm to less than 1 micronm would not have worked in Ohashi's method. It is argued that Ohashi is an anti-corrosion treatment which is carried out following a planarization step, and is aimed for removal of undesired chemicals whereas the aim of the cleaning process of the present invention is to prevent oxidation of the surface of wiring by means of irradiating light. This argument does not commensurate with the scope of claim 1 since claim 1 does not require "to prevent oxidation of the surface by of wiring by mean of irradiation with light" .